

Serial No.: 10/565,195  
Docket No.: 102-1647T  
Amendment After Final dated April 26, 2010  
Reply to the Final Office Action of January 26, 2010

## **REMARKS**

### **Introduction**

Upon entry of the foregoing amendment, claims 1-18 and 20 are pending in the application. Claims 1, 13, and 18 have been amended. Claim 19 has been canceled without prejudice or disclaimer. No new matter is being presented. In view of the following remarks, reconsideration and allowance of all the pending claims are requested.

Entry of this Amendment After Final is proper under 37 C.F.R. §1.116 because the claim amendments: (a) place this application in condition for allowance (for the reasons discussed herein), (b) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution as indicated in the Final Office Action), (c) present the rejected claims in better form for consideration on appeal (should an appeal be necessary), and (d) are necessary and were not earlier presented because they are made in response to arguments raised in the Final Office Action.

Accordingly, for at least the reasons discussed above, entry of this Amendment is respectfully requested.

### **Rejection under 35 USC § 103**

Claims 1-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable by U.S. Patent No. 6,778,475 to Izumi (hereinafter, "Izumi"). In view of the following remarks, reconsideration and allowance of these claims are earnestly solicited.

#### **Claim 1**

Referring to independent claim 1, in the Office Action dated January 26, 2010, the Examiner alleges that Izumi discloses all of the limitations recited in independent claim 1. In particular, the Examiner alleges that Izumi discloses:

a first detector ("210"-212" in figure 9) divided into eight section (see sections "a" – "h") detecting the at least three light components reflected by the optical recording medium to convert the light components into a first set of electrical signals.

However, it is respectfully submitted that Izumi does not teach or disclose all of the features as presently recited in independent claim 1, for at least the following reasons.

Referring to FIG. 9 of Izumi as relied upon by the Examiner, Izumi illustrates a detector including light reception areas 210, 211, and 212. Izumi illustrates that the light reception area 210 is divided into areas "a", "b", "c", and "d", the light reception area 211 is divided into areas "e", "f", "g", and "h", and the light reception area 212 is divided into areas "i", "j", "k", and "l." That is, Izumi illustrates that each of the light reception areas 210, 211, and 212 are divided into four areas for a total of twelve divided areas in the detector, not a "first detector" that is "divided into no more than eight sections" to detect "at least three light components reflected by the optical recording medium" and to "convert the light components" into a "first set of electrical signals." At best, Izumi illustrates a detector having twelve divided reception areas, not a "first detector" that is "divided" into "no more than eight sections" to detect "at least three light components reflected by the optical recording medium" and to "convert the light components" into a "first set of electrical signals."

Applicants respectfully submit that as Izumi does not teach or disclose a "first detector" that is "divided" into "no more than eight sections" to "convert the light components" into a "first set of electrical signals," Applicant submits that Izumi does not teach or disclose, among other things, calculating a "first tracking error signal," a "first focusing error signal," and a "second tracking error signal" from the "first set of electrical signals" that are "converted" by the "first detector." That is, Izumi illustrates and describes detecting focus error signals and tracking error signals with the detector having twelve sections, not calculating a "first tracking error signal," a "first focusing error signal," and a "second tracking error signal" from the "first set of electrical signals" that are "converted" by the "first detector" that is "divided" into "no more than eight sections" to "convert the light components" into a "first set of electrical signals."

Therefore, Izumi does not teach or disclose, among other things, "a first detector divided into no more than eight sections detecting the at least three light components reflected by the optical recording medium to convert the light components into a first set of electrical signals," "a

first calculating portion calculating a first tracking error signal from the first set of electrical signals converted by the first detector by a differential push-pull method," and "a second calculating portion calculating a first focusing error signal by an astigmatism method and calculating a second tracking error signal by a differential phase detection method from the first set of electrical signals converted by the first detector" as presently recited in independent claim 1.

Since Izumi does not teach or disclose each of the features as recited in independent claim 1, claim 1 is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

#### Claims 2-12

With regard to claims 2-12, it is requested that for at least the reasons that these claims depend from allowable independent claim 1, and therefore contain each of the features recited in claim 1, claims 2-12 are also patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of these rejection and allowance of these claims are earnestly solicited.

#### Claim 13

Referring to independent claim 13, in the Office Action dated January 26, 2010, the Examiner alleges that Izumi discloses all of the limitations recited in independent claim 13. In particular, the Examiner alleges that Izumi discloses:

a first detector ("210"- "212" in figure 9) divided into eight section (see sections "a" – "h") detecting the at least three light components reflected by the optical recording medium to convert the light components into a first set of electrical signals.

However, it is respectfully submitted that Izumi does not teach or disclose all of the features as presently recited in independent claim 13, for at least the same reasons as discussed above in connection with claim 1.

Therefore, Izumi does not teach or disclose, among other things, "a first detector divided into no more than eight sections detecting the reflected light components from the optical recording medium and converting the reflected light components into a first set of electrical signals," "a first calculating portion calculating a first tracking error signal from the first set of electrical signals converted by the first detector using a differential push-pull method," "a second calculating portion calculating a first focusing error signal and a second tracking error signal from the first set of electrical signals converted by the first detector using an astigmatism method and a differential phase detection method, respectively" as presently recited in independent claim 13.

Since Izumi does not teach or disclose each of the features as recited in independent claim 13, claim 13 is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

#### Claims 14-17

With regard to claims 14-17, it is requested that for at least the reasons that these claims depend from allowable independent claim 13, and therefore contain each of the features recited in claim 13, claims 14-17 are also patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of these rejection and allowance of these claims are earnestly solicited.

#### Claim 18

Referring to independent claim 18, in the Office Action dated January 26, 2010, the Examiner alleges that Izumi discloses all of the limitations recited in independent claim 18. In particular, the Examiner alleges that Izumi discloses:

[a] first detector is divided into eight detecting regions (210-212 in figure 9, see (a-h) and the second detector is divided into four detecting regions (see "310" (m-p). or see "410"- "412" in figure 10).

However, it is respectfully submitted that Izumi does not teach or disclose all of the features as presently recited in independent claim 18, for at least the following reasons.

Referring to FIG. 9 of Izumi as relied upon by the Examiner, Izumi illustrates a detector having light reception areas 21, 211, and 212. Izumi illustrates that the light reception area 210 is divided into areas "a", "b", "c", and "d", the light reception area 211 is divided into areas "e", "f", "g", and "h", and the light reception area 212 is divided into areas "i", "j", "k", and "l." That is, Izumi illustrates that light reception areas 210, 211, and 212 are each divided into four areas, for a total of twelve divided areas, not a "first detector" that is "divided into no more than eight detecting regions" and a "second detector" that is "divided into four detecting regions." At best, Izumi illustrates a detector having twelve reception areas, not a "first detector" that is "divided" into "no more than eight detecting regions."

Therefore, Izumi does not teach or disclose, among other things, that "the first detector is divided into no more than eight detecting regions and the second detector is divided into four detecting regions" as presently recited in independent claim 18.

Since Izumi does not teach or disclose each of the features as recited in independent claim 18, claim 18 is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

#### Claims 19 and 20

With regard to claims 19 and 20, it is requested that for at least the reasons that these claims depend from allowable independent claim 18, and therefore contain each of the features recited in claim 18, claims 19 and 20 are also patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of these rejection and allowance of these claims are earnestly solicited.

Serial No.: 10/565,195  
Docket No.: 102-1647T  
Amendment After Final dated April 26, 2010  
Reply to the Final Office Action of January 26, 2010

### **Examiner's Response to Arguments**

On page 10 of the Office Action, the Examiner states that "Applicant's arguments with respect to claims 1-17 rejected in the Official Action mailed 8/10/2009 have been considered but are not persuasive." In the Remarks above, Applicants address the Examiner's Response to Arguments recited on pages 10-13 of the Office Action, as well as the rejection recited on pages 2-10 of the Office Action. Reconsideration of the pending claims in view of the above remarks is earnestly solicited.

### **Conclusion**

It is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, there being no other objections or rejections, this application is in condition for allowance, and a notice to this effect is earnestly solicited.

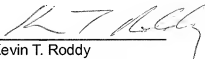
If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

If any further fees are required in connection with the filing of this amendment, please charge the same to our Deposit Account No. 502827.

Respectfully submitted,

STANZIONE & KIM, LLP

Dated: April 26, 2010  
919 18<sup>th</sup> St., NW, Suite 440  
Washington, DC 20006  
Telephone: (202) 775-1900  
Facsimile: (202) 775-1901

By:   
Kevin T. Roddy  
Registration No. 50,577